2004 Diurnal Cycle of Total Precipitation Rate [mm/hr] CORE Subregion - Global Models June 2004 July 2004 August 2004 0.6 0.4 0.2 1B 21 00 03 06 09 12 15 18 21 00 03 06 09 12 15 υτc 0 RMORPH TRMM CAM3a САМЗЬ CAM3c CFS FVM GEOS5 GFS CORE Subregion - Regional Models June 2004 July 2004 August 2004 0.6 0.4 0.2 οв 12 15 21 03 06 09 óз 18 οò 12 UTC 0-0 RMORPH TRMM мм5а мм5ь RAMS RSM

Fig.1. Diurnal cycle of total precipitation over the NAME Core region for the months of June, July and August from all participating model simulations. Upper panel includes the diurnal cycle from global model simulations and lower panel corresponds to that from regional model simulations. The model simulations are compared to two estimates of observed precipitation, RMORPH and TRMM.

Time Series of Total Daily Precipitation [cm]

June 1st to Sept 9th, 2004; Averaged over the AZNM Subregion

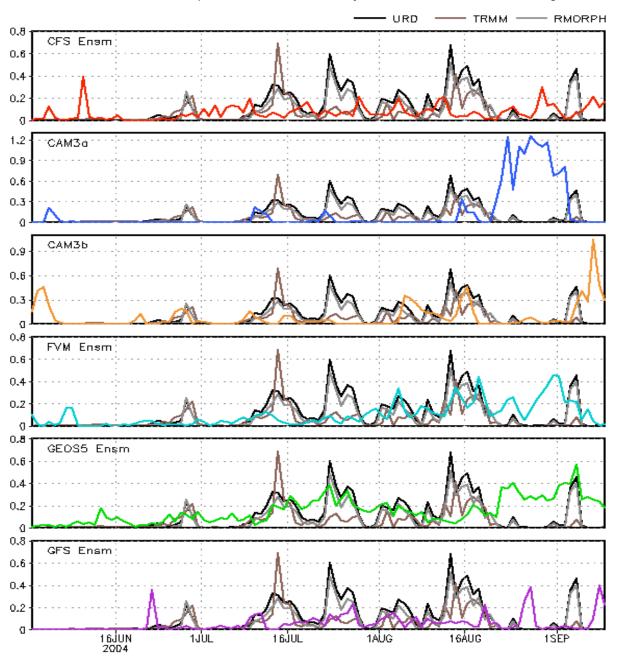


Fig. 2. Time series of daily total precipitation from June 1 through September 9, 2004 from global model simulations. Model simulations are compared to three different estimates of observed precipitation for the same period.

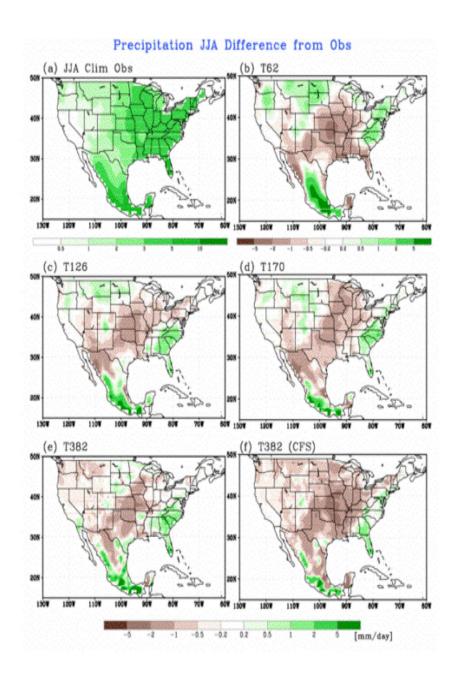


Fig.3. Climatological precipitation over North America for June-July-August season from CPC gauge-based analysis (a) and climatological precipitation differences from the observed in GFS and CFS GCM simulations with different horizontal resolutions. GFS simulations were performed in T62(b), T126(c), T170(d), and T382(e) resolutions. CFS simulations were done in T382(f) resolution only.

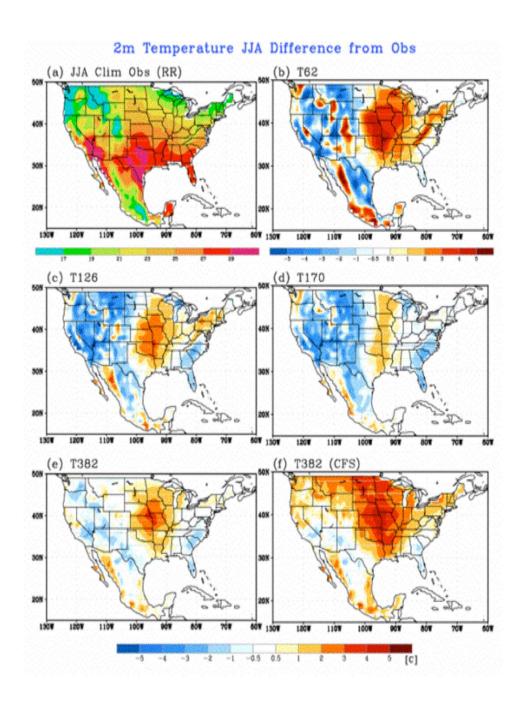


Fig.4. Same as in Fig. 3, but for 2m temperature.